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William H. Chang			RILEY, MARCUS T	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/053,765	<b>Applicant(s)</b> CHANG ET AL.
	<b>Examiner</b> MARCUS T. RILEY	<b>Art Unit</b> 2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on 06/10/2008.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 1-59 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 29-59 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 18 January 2002 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1668)  
     Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_

**DETAILED ACTION**

**Response to Amendment**

1. This office action is responsive to applicant's remarks received on June 10, 2008. Claims 29-33 & 39-59 remain pending. Claims 1-28 & 34-38 have been cancelled.

**Response to Arguments**

2. Applicant's arguments with respect to amended claims 29 & 31, filed on June 10, 2008 have been fully considered but they are not persuasive.

**A: Applicant's Remarks**

*Applicant submits that the recited information apparatus is distinct from the netpage pen of Silverbrook and the optically scanned images of McIntyre. There is no teaching or suggestion of previously storing digital data content on the netpage pen or downloading to it content from a server over a network. Applicant submits therefore that the cited references do not teach or suggest the information apparatus recited in the claim.*

*McIntyre provides no teaching or suggestion of "receiving over the wireless communication channel a device dependent attribute from each wireless device found in the search and the attribute corresponding to each wireless device found in the search being at least one of a name, a device type, a device address number, a security code, and a device profile." Applicant submits, therefore, that the rejection should be withdrawn because the cited references fail to teach or suggest this feature.*

*Also, applicant submits that the cited references do not teach or suggest "conforming, at the information apparatus, at least part of the content into an output data, the conforming using at least in part the said device dependent attribute received from the selected wireless output device and over the wireless communication channel, the output data comprising at least one digital file encoded with a digital format that include the content."*

*The dedicated, integrated netpage system of Silverbrook provides no teaching or suggestion of receiving over a wireless communication channel a device dependent attribute from each wireless device found in the search, the attribute including at least one of a name, a device type, a device address number, a security code, and a device profile. Also, the dedicated, integrated netpage system of Silverbrook provides no teaching or suggestion of conforming content according to device dependent attributes, as recited in the claim. Silverbrook merely reads a printed page and transmits what is read to a dedicated printer. Likewise, McIntyre provides no teaching or suggestion of these features.*

*McIntyre, like Silverbrook, is directed to optically scanning a printed or hard copy image. McIntyre does not describe or suggest a method of transferring digital data content from an information apparatus to a wireless output device, the content being previously stored locally at the information apparatus or downloaded from a server over a network to the information apparatus. Instead, McIntyre describes "scanning a hard copy of an image provided by a user to provide a digital image."*

*McIntyre does not teach or suggest searching wirelessly for a wireless device that is available for wireless connection, including receiving over the wireless communication channel a device dependent attribute from each wireless device found in the search, the attribute*

*corresponding to each wireless device found in the search and being at least one of a name, a device type, a device address number, a security code, and a device profile.*

**A: Examiner's Response**

1. Examiner submits that the recited information apparatus is not distinct from the Silverbrook or McIntyre either alone or in combination. Silverbrook discloses, teaches or suggests previously stored digital data content or downloading the content from a server over a network (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer."* column 18, lines 13-17). See also (*"Each netpage pen is assigned a unique identifier at time of manufacture which is stored in read-only memory in the pen and in the netpage registration server database. The pen ID 61 uniquely identifies the pen on the netpage network. A netpage pen can "know" a number of netpage printers, and a printer can "know" a number of pens. A pen communicates with a printer via a radio frequency signal whenever it is within range of the printer."* column 32, lines 8-15). Thus, examiner submits that the cited references do teach or suggest the information apparatus recited in the claim.

2. Silverbrook either alone or in combination discloses, teaches or suggests "receiving over the wireless communication channel a device dependent attribute from each wireless device found in the search" (*"In accordance with the invention, there is provided method of interfacing with an Internet resource, including... and effecting said response upon receipt of response data received from a sensing device with which a user interacts with the element, the sensing device being adapted to transmit the response data to a computer system linked to the Internet, in order to effect said response.."* column 2, lines 14-26); and the attribute corresponding to each wireless device found in the search being at least one of a name, a device type, a device address

number, a security code, and a device profile." (*The pen is wireless and communicates with the netpage printer via a short-range radio link. Tags are sufficiently small and densely arranged that the pen can reliably image at least one tag even on a single click on the page. It is important that the pen recognize the page ID and position on every interaction with the page, since the interaction is stateless.*" column 8, lines 56-62). Thus, examiner submits that the cited references do not fail to teach or suggest this feature.

3. Silverbrook either alone or in combination discloses, teaches or suggests "conforming, at the information apparatus, at least part of the content into an output data, the conforming using at least in part the said device dependent attribute received from the selected wireless output device and over the wireless communication channel, the output data comprising at least one digital file encoded with a digital format that include the content." (*The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer.*" column 18, lines 13-17). Thus, examiner submits that the cited references do teach or suggest the information apparatus recited in the claim.

4. Silverbrook either alone or in combination discloses, teaches or suggests receiving over a wireless communication channel a device dependent attribute from each wireless device found in the search, the attribute including at least one of a name, a device type, a device address number, a security code, and a device profile. (*The pen is wireless and communicates with the netpage printer via a short-range radio link. Tags are sufficiently small and densely arranged that the pen can reliably image at least one tag even on a single click on the page. It is important that the pen recognize the page ID and position on every interaction with the page, since the interaction is stateless.*" column 8, lines 56-62). Furthermore, Silverbrook either alone or in combination discloses, teaches or suggests conforming content according to device dependent

attributes, as recited in the claim. (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer."* column 18, lines 13-17). Thus, examiner submits that the cited references do teach or suggest the information apparatus recited in the claim.

5. Silverbrook either alone or in combination discloses, teaches or suggests a method of transferring digital data content from an information apparatus to a wireless output device, the content being previously stored locally at the information apparatus or downloaded from a server over a network to the information apparatus (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer."* column 18, lines 13-17). See also (*"Each netpage pen is assigned a unique identifier at time of manufacture which is stored in read-only memory in the pen and in the netpage registration server database. The pen ID 61 uniquely identifies the pen on the netpage network. A netpage pen can "know" a number of netpage printers, and a printer can "know" a number of pens. A pen communicates with a printer via a radio frequency signal whenever it is within range of the printer."* column 32, lines 8-15). Thus, examiner submits that the cited references do teach or suggest the information apparatus recited in the claim.

6. Silverbrook either alone or in combination discloses, teaches or suggests searching wirelessly for a wireless device that is available for wireless connection, (*"A tag is sensed by an area image sensor in the netpage pen, and the tag data is transmitted to the netpage system via the nearest netpage printer. The pen is wireless and communicates with the netpage printer via a short-range radio link."* column 8, lines 54-58). Furthermore, Silverbrook either alone or in combination discloses, teaches or suggests including receiving over the wireless communication channel a device dependent attribute from each wireless device

found in the search (*"In accordance with the invention, there is provided method of interfacing with an Internet resource, including... and effecting said response upon receipt of response data received from a sensing device with which a user interacts with the element, the sensing device being adapted to transmit the response data to a computer system linked to the Internet, in order to effect said response."* column 2, lines 14-26); the attribute corresponding to each wireless device found in the search and being at least one of a name, a device type, a device address number, a security code, and a device profile (*"The pen is wireless and communicates with the netpage printer via a short-range radio link. Tags are sufficiently small and densely arranged that the pen can reliably image at least one tag even on a single click on the page. It is important that the pen recognize the page ID and position on every interaction with the page, since the interaction is stateless."* column 8, lines 56-62). Thus, examiner submits that the cited references do teach or suggest the information apparatus recited in the claim.

**Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 29-35** are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. (US 6,813,039 B1 hereinafter, Silverbrook '039) in combination with McIntyre (US 6,958,821 hereinafter, McIntyre '821).

**Regarding claim 29;** Silverbrook '039 discloses a method of transferring digital data from an information apparatus with access to content to a wireless output device by short range wireless communication (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio*

*link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer.*" column 18, lines 13-17).

the content being previously stored locally at the information apparatus or downloaded from a server over a network to the information apparatus ("Each netpage pen is assigned a unique identifier at time of manufacture which is stored in read-only memory in the pen and in the netpage registration server database. The pen ID 61 uniquely identifies the pen on the netpage network. A netpage pen can "know" a number of netpage printers, and a printer can "know" a number of pens. A pen communicates with a printer via a radio frequency signal whenever it is within range of the printer." column 32, lines 8-15);

wherein the information apparatus includes at least one wireless communication unit, the method comprising: opening a wireless communication channel ("A tag is sensed by an area image sensor in the netpage pen, and the tag data is transmitted to the netpage system via the nearest netpage printer. The pen is wireless and communicates with the netpage printer via a short-range radio link." column 8, lines 54-58);

searching wirelessly for a wireless device that is available for wireless connection ("A tag is sensed by an area image sensor in the netpage pen, and the tag data is transmitted to the netpage system via the nearest netpage printer. The pen is wireless and communicates with the netpage printer via a short-range radio link." column 8, lines 54-58);

receiving over the wireless communication channel a device dependent attribute from each wireless device found in the search ("In accordance with the invention, there is provided method of interfacing with an Internet resource, including... and effecting said response upon receipt of response data received from a sensing device with which a user interacts with the element, the sensing device being adapted to transmit the response data to a computer system linked to the Internet, in order to effect said response.." column 2, lines 14-26);

the attribute corresponding to each wireless device found in the search being at least one of a name, a device type, a device address number, a security code, and a device profile ("The pen is wireless and communicates with the netpage printer via a short-range radio link. Tags are sufficiently small and densely arranged that the pen can reliably image at least one tag even on a single click on the page. It is important that the pen recognize the page ID and position on every interaction with the page, since the interaction is stateless." column 8, lines 56-62);

conforming, at the information apparatus, at least part of the content into an output data, the conforming using at least in part the said device dependent attribute received from the selected wireless output device and over the wireless communication channel, the output data comprising at least one digital file encoded with a digital format that include the content (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer."* column 18, lines 13-17);

and transferring the output data over the wireless connection to the selected wireless output device for rendering (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer."* column 18, lines 13-17).

Silverbrook '039 does not expressly disclose selecting a wireless output device found in the search based at least in part on the received attributes, the output device being at least one of a printing device, an audio device and a display device; and establishing a wireless connection with the selected wireless output device.

McIntyre '821 discloses selecting a wireless output device found in the search based at least in part on the received attributes, the output device being at least one of a printing device, an audio device and a display device (*"This object is achieved by a method of analyzing an image provided by a user to determine the likelihood of user interest in materials related to products of third parties and sending such materials for display or printing for the user... and c) selecting one or more items of product materials based on their likelihood of interest to the user and sending them to the user for display or printing."* column 2, lines 18-41). See also (*"It should also be noted that the present invention implemented in a combination of software and/or hardware is not limited to devices, which are physically connected and/or located within the same physical location. One or more of the devices illustrated in FIG. 3 may be located remotely and may be connected via a wireless connection."* column 7, lines 57-62);

establishing a wireless connection with the selected wireless output device (*"It should also be noted that the present invention implemented in a combination of software and/or hardware is not limited to devices, which are physically connected and/or located within the same physical location. One or more of the devices illustrated in FIG. 3 may be located remotely and may be connected via a wireless connection."* column 7, lines 57-62).

Silverbrook '039 and McIntyre '821 are combinable because they are from same field of endeavor of network systems (*"FIG. 2A is a block diagram showing communications network of connected computers suitable for practicing the present invention..."* McIntyre '821 at column 2, lines 61-63).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network system as taught by Silverbrook '039 by adding selecting a wireless output device found in the search based at least in part on the received attributes, the output device being at least one of a printing device, an audio device and a display device; and establishing a wireless connection with the selected wireless output device as taught by McIntyre '821. The motivation for doing so would have been because it advantageous to provide an advertiser or other purveyor of information with the opportunity to automatically make intelligent directed advertising decisions by analyzing the image content of consumer digital images (*"It is an advantage of the present invention that it provides an advertiser or other purveyor of information with the opportunity to automatically make intelligent directed advertising decisions by analyzing the image content of consumer digital images."* McIntyre '821 at column 5, lines 1-2). Therefore, it would have been obvious to combine Silverbrook '039 with McIntyre '821 to obtain the invention as specified in claim 1.

**Regarding claim 30;** Silverbrook '039 discloses after the selecting step: obtaining a security key at the information apparatus (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer."* column 18, lines 13-17);

sending the security key to the selected output device over the wireless communication channel for authentication (*"Cryptography is used to protect sensitive information, both in storage and in transit, and to authenticate parties to a transaction. There are two classes of cryptography in widespread use: secret-key cryptography and public-key cryptography. The netpage network uses both classes of cryptography."* column 30, lines 48-53);

receiving over the wireless communication channel at least an indication related to a successful security key authentication (*"...when reference is made to the secure transmission of information between a netpage printer and a server, what actually happens is that the printer obtains the server's certificate, authenticates it with reference to the certificate authority, uses the public key-exchange key in the certificate to exchange a secret session key with the server, and then uses the secret session key to encrypt the message data. A session key, by definition, can have an arbitrarily short lifetime."* column 31, lines 32-40);

and utilizing the authenticated security key to establish secure wireless access to the selected wireless output device (*"Once the application has distributed all of the document structures to the subscribers' selected printers via the relevant page servers, it multicasts the various subsets of the shared objects on the previously selected multicast channels. Both page servers and printers monitor the appropriate multicast channels and receive their required content objects. They are then able to populate the previously pointcast document structures. This allows the page servers to add complete documents to their databases, and it allows the printers to print the documents."* column 36, lines 16-24).

**Regarding claim 31;** Silverbrook '039 discloses a method of secure wireless transfer of digital data from an information apparatus with access to content to a wireless output device by short range wireless communication (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer."* column 18, lines 13-17).

the content being previously stored locally at the information apparatus or accessible over the internet to the information apparatus or downloadable from a server over a network to the information apparatus (*"Each netpage pen is assigned a unique identifier at time of manufacture which is stored in read-only memory in the pen and in the netpage registration server database. The pen ID 61 uniquely identifies the pen on the netpage*

*network. A netpage pen can "know" a number of netpage printers, and a printer can "know" a number of pens. A pen communicates with a printer via a radio frequency signal whenever it is within range of the printer.*" column 32, lines 8-15);

wherein the information apparatus includes at least one wireless communication unit, the method comprising: opening a wireless communication channel ("The pen is wireless and communicates with the netpage printer via a short-range radio link. Tags are sufficiently small and densely arranged that the pen can reliably image at least one tag even on a single click on the page. It is important that the pen recognize the page ID and position on every interaction with the page, since the interaction is stateless." column 8, lines 56-62);

searching over the wireless communication channel for a wireless device that is available for wireless connection ("A tag is sensed by an area image sensor in the netpage pen, and the tag data is transmitted to the netpage system via the nearest netpage printer. The pen is wireless and communicates with the netpage printer via a short-range radio link." column 8, lines 54-58);

receiving over the wireless communication channel at least an attribute from each wireless device found in the search

("In accordance with the invention, there is provided method of interfacing with an Internet resource, including... and effecting said response upon receipt of response data received from a sensing device with which a user interacts with the element, the sensing device being adapted to transmit the response data to a computer system linked to the Internet, in order to effect said response.." column 2, lines 14-26);

the attribute corresponding to each wireless device found in the search including one or more of a name, a device type, a device address, and an device profile related to each of the wireless device ("The pen is wireless and communicates with the netpage printer via a short-range radio link. Tags are sufficiently small and densely arranged that the pen can reliably image at least one tag even on a single click on the page. It is important that the pen recognize the page ID and position on every interaction with the page, since the interaction is stateless." column 8, lines 56-62);

obtaining a security key relating to the selected wireless output device at the information apparatus ("The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted

*digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer.*" column 18, lines 13-17);

sending the security key to the selected output device over the wireless communication channel for authentication ("*Cryptography is used to protect sensitive information, both in storage and in transit, and to authenticate parties to a transaction. There are two classes of cryptography in widespread use: secret-key cryptography and public-key cryptography. The netpage network uses both classes of cryptography.*" column 30, lines 48-53). See also ("*The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer.*" column 18, lines 13-17);

receiving over the wireless communication channel at least an indication related to a successful security key authentication ("...*when reference is made to the secure transmission of information between a netpage printer and a server, what actually happens is that the printer obtains the server's certificate, authenticates it with reference to the certificate authority, uses the public key-exchange key in the certificate to exchange a secret session key with the server, and then uses the secret session key to encrypt the message data. A session key, by definition, can have an arbitrarily short lifetime.*" column 31, lines 32-40);

conforming, at the information apparatus, at least part of the content into an output data, the conforming related at least in part to the attribute received from the output device and over the wireless communication channel ("*The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer.*" column 18, lines 13-17);

and transferring the output data over the wireless connection to the selected wireless output device for rendering ("*The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer.*" column 18, lines 13-17).

and transferring the output data over the secure wireless communication channel to the selected wireless output device ("*The pen is wireless and transmits digital ink to the netpage printer via a short-range*

*radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer.*" column 18, lines 13-17).

Silverbrook '039 does not expressly disclose selecting a wireless output device found in the search based at least in part on the received attributes; establishing a secured wireless communication channel with the selected wireless output device.

McIntyre '821 discloses selecting a wireless output device found in the search based at least in part on the received attributes ("This object is achieved by a method of analyzing an image provided by a user to determine the likelihood of user interest in materials related to products of third parties and sending such materials for display or printing for the user... and c) selecting one or more items of product materials based on their likelihood of interest to the user and sending them to the user for display or printing." column 2, lines 18-41). See also ("It should also be noted that the present invention implemented in a combination of software and/or hardware is not limited to devices, which are physically connected and/or located within the same physical location. One or more of the devices illustrated in FIG. 3 may be located remotely and may be connected via a wireless connection." column 7, lines 57-62);

establishing a secured wireless communication channel with the selected wireless output device ("It should also be noted that the present invention implemented in a combination of software and/or hardware is not limited to devices, which are physically connected and/or located within the same physical location. One or more of the devices illustrated in FIG. 3 may be located remotely and may be connected via a wireless connection." column 7, lines 57-62);

Silverbrook '039 and McIntyre '821 are combinable because they are from same field of endeavor of network systems ("FIG. 2A is a block diagram showing communications network of connected computers suitable for practicing the present invention..." McIntyre '821 at column 2, lines 61-63).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network system as taught by Silverbrook '039 by adding selecting a wireless output device found in the search based at least in part on the received attributes, the output device being at least one of a printing device, an audio device and a display device; and establishing a wireless connection with the selected wireless output device as taught by McIntyre

‘821. The motivation for doing so would have been because it advantageous to provide an advertiser or other purveyor of information with the opportunity to automatically make intelligent directed advertising decisions by analyzing the image content of consumer digital images (“*It is an advantage of the present invention that it provides an advertiser or other purveyor of information with the opportunity to automatically make intelligent directed advertising decisions by analyzing the image content of consumer digital images.*” McIntyre ‘821 at column 5, lines 1-2). Therefore, it would have been obvious to combine Silverbrook ‘039 with McIntyre ‘821 to obtain the invention as specified in claim 31.

**Regarding claim 32;** Silverbrook ‘039 discloses where the said security key compromises at least one of a user name, password, ID number, signatures, security keys (physical or digital), biometrics, fingerprints, and a voice (“*Public-key cryptography can be used to create a digital signature. The holder of the private key can create a known hash of a message and then encrypt the hash using the private key. Anyone can then verify that the encrypted hash constitutes the “signature” of the holder of the private key with respect to that particular message by decrypting the encrypted hash using the public key and verifying the hash against the message. If the signature is appended to the message, then the recipient of the message can verify both that the message is genuine and that it has not been altered in transit.*” column 31, lines 4-14).

**Regarding claim 33;** Silverbrook ‘039 discloses where the step of obtaining the said security key comprises inputting by the user or retrieving a key that was previously stored in the information apparatus (“*...when reference is made to the secure transmission of information between a netpage printer and a server, what actually happens is that the printer obtains the server’s certificate, authenticates it with reference to the certificate authority, uses the public key-exchange key in the certificate to exchange a secret session key with the server, and then uses the secret session key to encrypt the message data.*” column 31, lines 32-40).

**Regarding claim 39;** Silverbrook '039 discloses wherein the network includes the Internet ("*In accordance with the invention, there is provided method of interfacing with an Internet resource...*," column 2, lines 15-16).

**Regarding claim 40;** Silverbrook '039 discloses wherein the information apparatus being at least one of a desktop computer, a laptop computers, a networked computer, a palmtop computer, a hand-held computer, a personal digital assistant, an Internet enabled mobile phone, a smart phone, an Internet appliance, and a web pad ("*The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link.*" column 18, lines 13-14).

**Regarding claim 41;** Silverbrook '039 discloses wherein the information apparatus further include a client application that include one or more functionalities that include internet browsing, content viewing, content selection, content creation, and content editing ("*Each netpage pen is assigned a unique identifier at time of manufacture which is stored in read-only memory in the pen and in the netpage registration server database. The pen ID 61 uniquely identifies the pen on the netpage network. A netpage pen can "know" a number of netpage printers, and a printer can "know" a number of pens. A pen communicates with a printer via a radio frequency signal whenever it is within range of the printer.*" column 32, lines 8-15).

**Regarding claim 42;** Silverbrook '039 discloses wherein the wireless communication unit include one or more of radio, infrared, cellular, ultrasonic, hydrophonic wireless communication ("*The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link.*" column 18, lines 13-14).

**Regarding claim 43;** Silverbrook '039 discloses wherein the wireless communication channel is compatible to a Bluetooth wireless protocol or one that is compatible to IEEE802.11 protocol (*"The image sensor is a 215.times.215 pixel CCD (such a sensor is produced by Matsushita Electronic Corporation, and is described in a paper by Itakura, K T Nobusada, N Okusenya, R Nagayoshi, and M Ozaki, "A 1 mm 50k-Pixel IT CCD Image Sensor for Miniature Camera System", IEEE Transactions on Electronic Devices, Volt 47, number 1, January 2000, which is incorporated herein by reference) with an IR filter."* column, lines ).

**Regarding claim 44;** Silverbrook '039 discloses wherein the device profile includes information related to at least one of a quality of service, a billing, a pricing, and a communication method (*"A tag is sensed by an area image sensor in the netpage pen, and the tag data is transmitted to the netpage system via the nearest netpage printer. The pen is wireless and communicates with the netpage printer via a short-range radio link."* column 8, lines 54-58);

**Regarding claim 45;** Silverbrook '039 discloses wherein the short range wireless communication channel is compatible to one of a Bluetooth or IEEE 802.11 standard protocol (*"The image sensor is a 215.times.215 pixel CCD (such a sensor is produced by Matsushita Electronic Corporation, and is described in a paper by Itakura, K T Nobusada, N Okusenya, R Nagayoshi, and M Ozaki, "A 1 mm 50k-Pixel IT CCD Image Sensor for Miniature Camera System", IEEE Transactions on Electronic Devices, Volt 47, number 1, January 2000, which is incorporated herein by reference) with an IR filter."* column 40, lines 40-47).

**Regarding claim 46;** Silverbrook '039 discloses wherein the wireless communication unit include one or more of radio, infrared, cellular, ultrasonic, hydrophonic wireless communication (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link."* column 18, lines 13-14).

**Regarding claim 47;** Silverbrook '039 discloses wherein the information apparatus being at least one of a desktop computer, a laptop computers, a networked computer, a palmtop computer, a hand-held computer, a personal digital assistant, an Internet enabled mobile phone, a smart phone, an Internet appliance, and a web pad (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link."* column 18, lines 13-14).

**Regarding claim 48;** Silverbrook '039 discloses wherein the output device is one of a printing device, an audio device or a display device (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer."* column 18, lines 13-17).

**Regarding claim 49;** Silverbrook '039 discloses wherein the device profile includes one or more information related to quality of service, billing, pricing, and communication method (*"A tag is sensed by an area image sensor in the netpage pen, and the tag data is transmitted to the netpage system via the nearest netpage printer. The pen is wireless and communicates with the netpage printer via a short-range radio link."* column 8, lines 54-58).

**Regarding claim 50;** Silverbrook '039 discloses a method of transferring digital data content from an information apparatus to a wireless output device by short range wireless communication (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer."* column 18, lines 13-17).

wherein the information apparatus includes a client application that enables user viewing of at least part of the said content with the information apparatus ("Each netpage pen is assigned a unique identifier at time of manufacture which is stored in read-only memory in the pen and in the netpage registration server database. The pen ID 61 uniquely identifies the pen on the netpage network. A netpage pen can "know" a number of netpage printers, and a printer can "know" a number of pens. A pen communicates with a printer via a radio frequency signal whenever it is within range of the printer." column 32, lines 8-15);

the information apparatus further includes at least one wireless communication unit, the method comprising: opening a wireless communication channel ("A tag is sensed by an area image sensor in the netpage pen, and the tag data is transmitted to the netpage system via the nearest netpage printer. The pen is wireless and communicates with the netpage printer via a short-range radio link." column 8, lines 54-58);

searching wirelessly for a wireless device that is available for wireless connection ("A tag is sensed by an area image sensor in the netpage pen, and the tag data is transmitted to the netpage system via the nearest netpage printer. The pen is wireless and communicates with the netpage printer via a short-range radio link." column 8, lines 54-58);

receiving over the wireless communication channel a device dependent attribute from each wireless device found in the search ("In accordance with the invention, there is provided method of interfacing with an Internet resource, including... and effecting said response upon receipt of response data received from a sensing device with which a user interacts with the element, the sensing device being adapted to transmit the response data to a computer system linked to the Internet, in order to effect said response.." column 2, lines 14-26);

the attribute corresponding to each wireless device found in the search and being one or more of a name, a device type, a device address number, a security code, and a device profile ("The pen is wireless and communicates with the netpage printer via a short-range radio link. Tags are sufficiently small and densely arranged that the pen can reliably image at least one tag even on a single click on the page. It is important that the pen recognize the page ID and position on every interaction with the page, since the interaction is stateless." column 8, lines 56-62);

conforming, at the information apparatus, at least part of the content into an output data, the conforming using at least in part the said device dependent attribute received from the

selected wireless output device over the wireless communication channel, the output data comprising at least one digital file encoded with a digital format that include the content (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer."* column 18, lines 13-17);

transferring the output data over the wireless connection to the selected wireless output device for rendering (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer."* column 18, lines 13-17).

Silverbrook '039 does not expressly disclose selecting a wireless output device found in the search based at least in part on the received attributes, establishing a wireless connection with the selected wireless output device.

McIntyre '821 discloses selecting a wireless output device found in the search based at least in part on the received device dependent attributes (*"This object is achieved by a method of analyzing an image provided by a user to determine the likelihood of user interest in materials related to products of third parties and sending such materials for display or printing for the user... and c) selecting one or more items of product materials based on their likelihood of interest to the user and sending them to the user for display or printing."* column 2, lines 18-41). See also (*"It should also be noted that the present invention implemented in a combination of software and/or hardware is not limited to devices, which are physically connected and/or located within the same physical location. One or more of the devices illustrated in FIG. 3 may be located remotely and may be connected via a wireless connection."* column 7, lines 57-62);

establishing a wireless connection with the selected wireless output device (*"It should also be noted that the present invention implemented in a combination of software and/or hardware is not limited to devices, which are physically connected and/or located within the same physical location. One or more of the devices illustrated in FIG. 3 may be located remotely and may be connected via a wireless connection."* column 7, lines 57-62);

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network system as taught by Silverbrook '039 by adding selecting a wireless output device found in the search based at least in part on the received attributes, establishing a wireless connection with the selected wireless output device as taught by McIntyre '821. The motivation for doing so would have been because it advantageous to provide an advertiser or other purveyor of information with the opportunity to automatically make intelligent directed advertising decisions by analyzing the image content of consumer digital images (*"It is an advantage of the present invention that it provides an advertiser or other purveyor of information with the opportunity to automatically make intelligent directed advertising decisions by analyzing the image content of consumer digital images."* McIntyre '821 at column 5, lines 1-2). Therefore, it would have been obvious to combine Silverbrook '039 with McIntyre '821 to obtain the invention as specified in claim 50.

**Regarding claim 51;** Silverbrook '039 discloses the information apparatus being at least one of a desktop computer, a laptop computers, a networked computer, a palmtop computer, a hand-held computer, an Internet enabled mobile phone, a smart phone, an Internet appliance, and a web pad (*"The pen is wireless and transmits digital link to the netpage printer via a short-range radio link."* column 18, lines 13-14).

**Regarding claim 52;** Silverbrook '039 discloses wherein the client application access the content with an internet browser that enables viewing and downloading of the content over the internet (*"Each netpage pen is assigned a unique identifier at time of manufacture which is stored in read-only memory in the pen and in the netpage registration server database. The pen ID 61 uniquely identifies the pen on the netpage network. A*

*netpage pen can "know" a number of netpage printers, and a printer can "know" a number of pens. A pen communicates with a printer via a radio frequency signal whenever it is within range of the printer.*" column 32, lines 8-15).

**Regarding claim 53;** Silverbrook '039 discloses wherein the client application further include a content creation and or editing function for creating and or editing of the said content at the information apparatus ("*Each netpage pen is assigned a unique identifier at time of manufacture which is stored in read-only memory in the pen and in the netpage registration server database. The pen ID 61 uniquely identifies the pen on the netpage network. A netpage pen can "know" a number of netpage printers, and a printer can "know" a number of pens. A pen communicates with a printer via a radio frequency signal whenever it is within range of the printer.*" column 32, lines 8-15).

**Regarding claim 54;** Silverbrook '039 discloses wherein the content is stored locally in the memory component of the information apparatus, and the client application accessing the content locally for sending to the output device over the wireless communication channel ("*Each netpage pen is assigned a unique identifier at time of manufacture which is stored in read-only memory in the pen and in the netpage registration server database. The pen ID 61 uniquely identifies the pen on the netpage network. A netpage pen can "know" a number of netpage printers, and a printer can "know" a number of pens. A pen communicates with a printer via a radio frequency signal whenever it is within range of the printer.*" column 32, lines 8-15);

**Regarding claim 55;** Silverbrook '039 discloses wherein after the selecting step: obtaining a security key at the information apparatus ("*The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer.*" column 18, lines 13-17);

sending the security key to the selected output device over the wireless communication channel for authentication ("*Cryptography is used to protect sensitive information, both in storage and in transit, and*

*to authenticate parties to a transaction. There are two classes of cryptography in widespread use: secret-key cryptography and public-key cryptography. The netpage network uses both classes of cryptography.*" column 30, lines 48-53). See also ("The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer." column 18, lines 13-17);

receiving over the wireless communication channel at least an indication related to a successful security key authentication and utilizing the authenticated security key to establish secure wireless access to the selected wireless output device ("...when reference is made to the secure transmission of information between a netpage printer and a server, what actually happens is that the printer obtains the server's certificate, authenticates it with reference to the certificate authority, uses the public key-exchange key in the certificate to exchange a secret session key with the server, and then uses the secret session key to encrypt the message data. A session key, by definition, can have an arbitrarily short lifetime." column 31, lines 32-40);

**Regarding claim 56;** Silverbrook '039 discloses wherein wireless communication unit include one or more of radio, infrared, cellular, ultrasonic, hydrophonic wireless communication ("The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link." column 18, lines 13-14).

**Regarding claim 57;** Silverbrook '039 discloses wherein the device profile includes information related to at least one of a quality of service, a billing, a pricing, and a communication method information ("A tag is sensed by an area image sensor in the netpage pen, and the tag data is transmitted to the netpage system via the nearest netpage printer. The pen is wireless and communicates with the netpage printer via a short-range radio link." column 8, lines 54-58).

**Regarding claim 58;** Silverbrook '039 discloses wherein the output device is one of a printing device, an audio device or a display device ("The pen is wireless and transmits digital ink to the

*netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer.*" column 18, lines 13-17).

**Regarding claim 59;** Silverbrook '039 discloses a computer readable medium containing software for transferring digital data content from an information apparatus to a wireless output device by short range wireless communication ("The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer." column 18, lines 13-17).

the content being previously stored locally at the information apparatus or downloaded from a server over a network to the information apparatus ("Each netpage pen is assigned a unique identifier at time of manufacture which is stored in read-only memory in the pen and in the netpage registration server database. The pen ID 61 uniquely identifies the pen on the netpage network. A netpage pen can "know" a number of netpage printers, and a printer can "know" a number of pens. A pen communicates with a printer via a radio frequency signal whenever it is within range of the printer." column 32, lines 8-15);

wherein the information apparatus includes at least one wireless communication unit, the medium comprising ("A tag is sensed by an area image sensor in the netpage pen, and the tag data is transmitted to the netpage system via the nearest netpage printer. The pen is wireless and communicates with the netpage printer via a short-range radio link." column 8, lines 54-58);

software for opening a wireless communication channel ("A tag is sensed by an area image sensor in the netpage pen, and the tag data is transmitted to the netpage system via the nearest netpage printer. The pen is wireless and communicates with the netpage printer via a short-range radio link." column 8, lines 54-58);

software for searching wirelessly for a wireless device that is available for wireless connection ("A tag is sensed by an area image sensor in the netpage pen, and the tag data is transmitted to the netpage system via the nearest netpage printer. The pen is wireless and communicates with the netpage printer via a short-range radio link." column 8, lines 54-58);

software for receiving over the wireless communication channel a device dependent attribute from each wireless device found in the search (*"In accordance with the invention, there is provided method of interfacing with an Internet resource, including... and effecting said response upon receipt of response data received from a sensing device with which a user interacts with the element, the sensing device being adapted to transmit the response data to a computer system linked to the Internet, in order to effect said response.."* column 2, lines 14-26);

the attribute corresponding to each wireless device found in the search and being at least one of a name, a device type, a device address number, a security code, and a device profile (*"The pen is wireless and communicates with the netpage printer via a short-range radio link. Tags are sufficiently small and densely arranged that the pen can reliably image at least one tag even on a single click on the page. It is important that the pen recognize the page ID and position on every interaction with the page, since the interaction is stateless."* column 8, lines 56-62);

software for conforming, at the information apparatus, at least part of the content into an output data, the conforming using at least in part the said device dependent attribute received from the selected wireless output device and over the wireless communication channel, the output data comprising at least one digital file encoded with a digital format that include the content (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer."* column 18, lines 13-17);

software for transferring the output data over the wireless connection to the selected wireless output device for rendering (*"The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer."* column 18, lines 13-17).

Silverbrook '039 does not expressly disclose software for selecting a wireless output device found in the search based at least in part on the received attributes, the output device being at least one of a printing device, an audio device and a display device.

McIntyre '821 discloses software for selecting a wireless output device found in the search based at least in part on the received attributes, the output device being at least one of a printing device, an audio device and a display device (*"This object is achieved by a method of analyzing an image provided by a user to determine the likelihood of user interest in materials related to products of third parties and sending such materials for display or printing for the user... and c) selecting one or more items of product materials based on their likelihood of interest to the user and sending them to the user for display or printing."* column 2, lines 18-41). See also (*"It should also be noted that the present invention implemented in a combination of software and/or hardware is not limited to devices, which are physically connected and/or located within the same physical location. One or more of the devices illustrated in FIG. 3 may be located remotely and may be connected via a wireless connection."* column 7, lines 57-62).

software for establishing a wireless connection with the selected wireless output device (*"It should also be noted that the present invention implemented in a combination of software and/or hardware is not limited to devices, which are physically connected and/or located within the same physical location. One or more of the devices illustrated in FIG. 3 may be located remotely and may be connected via a wireless connection."* column 7, lines 57-62).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network system as taught by Silverbrook '039 by adding selecting a wireless output device found in the search based at least in part on the received attributes, the output device being at least one of a printing device, an audio device and a display device; and establishing a wireless connection with the selected wireless output device as taught by McIntyre '821. The motivation for doing so would have been because it advantageous to provide an advertiser or other purveyor of information with the opportunity to automatically make intelligent directed advertising decisions by analyzing the image content of consumer digital

images ("*It is an advantage of the present invention that it provides an advertiser or other purveyor of information with the opportunity to automatically make intelligent directed advertising decisions by analyzing the image content of consumer digital images.*" McIntyre '821 at column 5, lines 1-2). Therefore, it would have been obvious to combine Silverbrook '039 with McIntyre '821 to obtain the invention as specified in claim 59.

**Conclusion**

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCUS T. RILEY whose telephone number is (571)270-1581. The examiner can normally be reached on Monday - Friday, 7:30-5:00, est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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